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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/457,895	12/10/1999	GERMANO CARONNI	6502.0287	8187

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EXAMINER

MCARDLE, JOSEPH M

ART UNIT PAPER NUMBER

2132

DATE MAILED: 06/16/2004

16

Please find below and/or attached an Office communication concerning this application or proceeding.

Handwritten signature

Office Action Summary

Application No.

09/457,895

Applicant(s)

CARONNI ET AL.

Examiner

Joseph McArdle

Art Unit

2132

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 19 December 2003.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-20 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-20 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 10 December 1999 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.
- Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- 11) ☐ The proposed drawing correction filed on _____ is: a) ☐ approved b) ☐ disapproved by the Examiner.
- If approved, corrected drawings are required in reply to this Office action.
- 12) ☐ The oath or declaration is objected to by the Examiner.

Priority under 35 U.S.C. §§ 119 and 120

- 13) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. _____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- * See the attached detailed Office action for a list of the certified copies not received.
- 14) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. § 119(e) (to a provisional application).
- a) ☐ The translation of the foreign language provisional application has been received.
- 15) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. §§ 120 and/or 121.

Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☒ Information Disclosure Statement(s) (PTO-1449) Paper No(s) 11-13, 1.
- 4) ☐ Interview Summary (PTO-413) Paper No(s). _____.
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other: _____.

DETAILED ACTION

Applicant's arguments were persuasive in overcoming the grounds of rejection set forth in the previous office action. However, newly discovered prior art has necessitated new grounds of rejection. The new grounds of rejection appear below. The delay in citation of the new grounds of rejection is regretted.

Specification

1. The disclosure is objected to because of the following informalities: On pages 1 and 2 of the specification the applicant is advised to update the status and numbers of the related applications. Appropriate correction is required.

Claim Rejections - 35 USC § 101

2. 35 U.S.C. 101 reads as follows:

Whoever invents or discovers any new and useful process, machine, manufacture, or composition of matter, or any new and useful improvement thereof, may obtain a patent therefor, subject to the conditions and requirements of this title.

Claims 15 and 16 are rejected under 35 U.S.C. 101 because the claimed invention is directed to non-statutory subject matter. Claims 15 and 16 are directed towards a data structure that contains non-functional descriptive material. Descriptive material that cannot exhibit any functional interrelationship with the way in which computing processes are performed does not constitute a statutory process. See MPEP § 2106

Claim Rejections - 35 USC § 103

1. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

2. Claims 1, 4, 9, 10, 12-15, 17, 18 and 20 are rejected under 35 U.S.C. 103(a) as being anticipated by Goertzel (U.S. Patent No. 6308273). In regards to claim 1, Goertzel discloses in column 4, lines 28-34 how a computer(s) can operate in a networked environment in order to communicate with other network nodes. Goertzel further discloses in column 5, lines 4-30 how access to network resources (such as file system entities as called for under claim 1) can be restricted according to the channel of communication that is being used to access the desired/requested network resources. Goertzel further gives an example in the aforementioned location that shows a user of a network device establishes who establishes communications over a particular channel, such as a VPN, will have less access rights to desired/requested network resources than a user who communicates who establishes communications through a local network (such as an intranet). Goertzel further discloses in the table located in column 6, how specific trust levels are established according to what communication channel a network device is operating over (as in the case of communicating over a VPN or a local intranet). It is these trust levels relating to the communication channel that determine what type of access a network device will have to certain network resources (files, etc). These disclosures meet the limitations set forth under claim 1 that call for having

network devices with nodes that communicate over a first channel and a second channel (as in the case of communicating over a VPN or a local intranet) in order to access file system entities as well as the limitations that call for limiting the access to the file system entities based on the particular communication channel that the network devices belong to and are communicating over.

3. In regards to claims 9, 13-15, and 17, Goertzel discloses in column 4, lines 28-34 how a computer(s) can operate in a networked environment in order to communicate with other network nodes. Goertzel further discloses in column 5, lines 4-30 how access to network resources (such as file system entities as called for under claims 9, 13-15, and 17) can be restricted according to the channel of communication that is being used to access the desired/requested network resources. This disclosure meets the limitation set forth under claims 9, 13-15, and 17 that calls for allowing a file system entity (network resource) to only be accessed if the requestor communicates over an authorized channel. Goertzel further gives an example in the aforementioned location that shows a user of a network device establishes who establishes communications over a particular channel, such as a VPN, will have less access rights to desired/requested network resources than a user who communicates who establishes communications through a local network (such as an intranet). Goertzel further discloses in the table located in column 6, how specific trust levels are established according to what communication channel a network device is operating over (as in the case of communicating over a VPN or a local intranet). It is these trust levels relating to the communication channel that determine what type of access a network device will

have to certain network resources (files, etc). These disclosures meet the limitations set forth under claims 9, 13-15, and 17 that call for limiting the access to the file system entities based on the particular communication channel (as in the case of communicating over a VPN or a local intranet) that the network devices belong to and are communicating over.

4. In regards to claim 4, Goertzel further discloses in the table located in column 6, how specific trust levels are established according to what communication channel a network device is operating over (as in the case of communicating over a VPN or a local intranet). It is these trust levels relating to the communication channel that determine what type of access a network device will have to certain network resources (files, etc). This meets the limitation of claim 4, which calls for maintaining a mapping between file systems and nodes contained within a particular communications channel in order to allow the nodes access to the file systems because the above disclosure allows network resources (file systems) to be restricted according to a specific trust level that is established in accordance with the communication channel.

5. In regards to claims 10 and 18, Goertzel further discloses in column 5, lines 4-30 how access to network resources (such as file system entities as called for under claim 1) can be restricted according to the channel of communication that is being used to access the desired/requested network resources. Goertzel further gives an example in the aforementioned location that shows a user of a network device establishes who establishes communications over a particular channel, such as a VPN, will have less access rights to desired/requested network resources than a user who communicates

who establishes communications through a local network (such as an intranet). These disclosures meet the limitations set forth under claims 10 and 20 that call limiting access to the file system when the node is not communicating over an authorized channel (as in the case of communicating over a VPN or a local intranet).

6. In regards to claims 12 and 20, Goertzel further discloses in column 8, lines 45-54 how restricting access to files (according to a particular communication channel such as a VPN or a local intranet) is done at the operating system level by the operating system. This meets the limitations of claims 12 and 20, which call for having a processor run an operating system, that handles requests for data and controls access to file systems which communicate over first and second communication channels.

6. Claim 2 is rejected under 35 U.S.C. 103(a) as being unpatentable over Goertzel in view of International Publication Number WO-9857464. Goertzel's design mentioned above discloses all of the aforementioned limitations set forth by claim 1. However, Goertzel's design does not specify that the distributed network is a private network running over a public network infrastructure. WO-9857464 discloses this exact limitation on page 5, lines 21-23, where it states that a virtual private network is implemented over the Internet or other public network space. It would have been obvious to one of ordinary skill in the art at the time the invention was made to substitute the teachings of WO-9857464 into Goertzel's design in order to achieve a private network that runs over a public network infrastructure.

7. Claims 7, 8 are rejected under 35 U.S.C. 103(a) as being unpatentable over Goertzel in view of Fabbio (5335346). In regards to claims 7 and 8, Goertzel's design

mentioned above discloses all of the aforementioned limitations set forth by claim 1.

However, Goertzel's design does not specify that in order to open or unlink a file system entity, a request is received from a node, which is then verified to determine if the node communicates over the same channel as the file system entity as described by claims 7 and 8. Fabbio discloses these limitations in column 7, lines 8 – 15, and in column 8, lines 49 – 51, where it is stated that when a user makes a request to retrieve or modify a data object, their credentials are checked against an access control entry in order to determine that the user or the group the user belongs to is allowed access to the data object. It would have been obvious to one of ordinary skill in the art at the time the invention was made to substitute Fabbio's teachings on the use of access control into Goertzel's design in order to achieve a design that is capable of controlling a nodes access to a file system entity.

9. Claims 3, 11, 16 and 19 are rejected under 35 U.S.C. 103(a) as being unpatentable over Goertzel in view of Arganat (5519833). Goertzel's design disclosed above meets all of the limitations set forth under claims 1, 9, 15, and 17. However, Goertzel's design makes no mention of having multiple types of devices each of which have a corresponding file type associated with it. Arganat's design teaches this limitation in column 6, lines 22-28, where it is disclosed that file nodes containing a file type that indicates what device the file is to be associated with is stored within a special directory that the operating system controls in order to associate the correct file type to a particular device. It would have been obvious to one of ordinary skill in the art at the time the invention was made to substitute Arganat's teachings into Goertzel's design in

order to achieve a design that is capable of associating a particular file type to a particular device.

10. Claim 5 is rejected under 35 U.S.C. 103(a) as being unpatentable over Goertzel in view of Gasser (5220604). Goertzel's design disclosed above meets all of the aforementioned limitations of claim 4. However, Goertzel's design does not return a list of file system entities, which are authorized to communicate over a particular channel in response to a user request. Gasser teaches this limitation in column 4, lines 46 - 54, where an access control list is described which contains a list of all possible access privileges and the users that have those privileges. It would have been obvious to one of ordinary skill in the art at the time the invention was made to substitute Gasser's teachings into Goertzel's design in order to achieve a design that maintains and returns a list of authorized users over a certain channel in response to a user request.

11. Claim 6 is rejected under 35 U.S.C. 103(a) as being unpatentable over the Goertzel-Gasser combination as applied to claim 5 above, and further in view of Agrawal (4825354). The Goertzel-Gasser combination disclosed above meets all of the aforementioned limitations set forth by claim 5 above. However, the Goertzel-Gasser combination does not make use of a proc structure (as disclosed by applicants specification on page 19, lines 16 - 18) in order to determine a nodes access rights. Agrawal discloses in column 6 lines 64 - 68, column 7, lines 1 - 24, and figure 2, that a UNIX environment operates on processes which are maintained by process tables (as shown in figure 2). These process tables contain information relating to the process itself such as its status, process ID, group information, and execution information.

Agrawal further discloses in column 2, lines 19 – 31, that these tables are consulted as a result of execution requests that are generated in response to a user request identifying a process to be executed. This process table disclosed by Agrawal performs the same functions as the applicants disclosed proc structure. It is also noted that the applicant's disclosure of a proc structure on page 19, lines 16 – 18 of the specification is considered as an admittance of prior art. It would have been obvious to one of ordinary skill in the art at the time the invention was made to substitute Agrawal's teachings into the Goertzel-Gasser combination in order to achieve a design that utilizes a process that relies on a proc structure in order to obtain information relating to the process.

Conclusion

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Joseph McArdle whose telephone number is (703) 305-7515. The examiner can normally be reached on Weekdays from 8:00 am - 5:00pm.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Gilberto Barron can be reached on (703) 305-1830. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

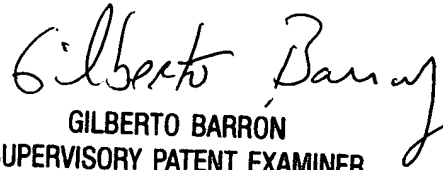
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Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).



Joseph McArdle
Examiner
Art Unit 2132

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